

Remarks

Applicants have amended claims 1-6, 10 and 23-26; canceled claims 7-9 and 11-21; and, added new claims 27-33. Support for Applicants' amendment and new claims can be found, for example, in paragraphs [0034 - 0040] and with reference to FIGS. 4 and 6 of the present application. No new matter has been added to the application by virtue of the present amendments.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claims 1-6, 8, 22, 23 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Baba, U.S. Patent No. 6,313,521 in view of Hoffman, U.S. Patent No. 6,630,661.

Applicants have amended claim 1 to include the limitations of original dependent claim 8. The Examiner rejected claim 8 stating that Baba in view of Hoffman disclosed a conductive structure [10] having about the same dimensions as a discrete chip component, and that Baba discloses the conductive structure [10] comprises a block. Applicants respectfully submit that Baba in view of Hoffman does not disclose, teach or suggest Applicants' claim 1, as amended.

The Examiner relies on FIG. 3 of Baba as disclosing a conductive structure [10] comprising a "block". Applicants respectfully disagree with the Examiner on this point. Rather, Applicants respectfully submit that Baba discloses an auxiliary board 10 which is a rectangular shaped ring with an opening (see Fig. 3 of Baba) so that auxiliary board 10 surrounds space 9 in which the semiconductor chip 2 and the chip components 7 are mounted (see column 7, lines 15-18 of Baba). Baba discloses that the auxiliary board 10 along with other structures is used to surround the semiconductor chip 2 and the chip components 7 to provide electromagnetic shielding. Baba requires the auxiliary board 10 to be a solid, continuous material so that "... electromagnetic wave generated during operation of the semiconductor chip 2 **does not escape** outside the semiconductor device 25 ..." (emphasis added) (see column 8, lines 35 – 44 of Baba). Baba can not have openings or spaces in the periphery of auxiliary board 10 since this would result in the

escape of electromagnetic radiation. Thus, Applicants respectfully submit that Baba provides no disclosure, teaching or motivation of a semiconductor package comprising a conductive block as claimed by Applicants.

Applicants respectfully submit that Hoffman would not provide any motivation, teaching or suggestion to combine with Baba since Hoffman discloses discrete structures so the combination of Baba and Hoffman would result in a plurality of discrete structures with spaces between each of the structures surrounding the semiconductor chip 2 and the chip components 7 resulting in the escape of electromagnetic waves. Applicants also note that auxiliary board 10 of Baba has a length and width which exceeds corresponding dimensions of semiconductor chip 2 so the auxiliary board 10 can not have the dimensions of a discrete chip component as taught by Hoffman. Thus, Applicants respectfully submit that Hoffman does not remedy the deficiencies in Baba since Baba requires a solid, continuous structure that exceeds the dimensions of a discrete chip component to surround the semiconductor chip 2 in order to prevent the escape of electromagnetic radiation.

Therefore, Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a) and submit that the rejections to claims 1-6, 8, 22, 23 and 25 have been overcome.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claims 1, 9-10, 12-13 and 24 under 35 U.S.C. § 103(a), as being unpatentable over Jimarez et al., U.S. Patent No. 6,407,334 in view of Hoffman, U.S. Patent No. 6,630,661.

Applicants have amended claim 1 to include the limitations of original dependent claim 8, and canceled claims 9 and 12-13. Claim 24 is dependent upon claim 1, as amended. Jimarez in view of Hoffman fails to disclose, teach or suggest Applicants' claim 1, as amended, and claims dependent thereupon.

Therefore, Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a) and submit that the rejections to claims 1, 9-10, 12-13 and 24 have been overcome.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Baba, U.S. Patent No. 6,313,521 in view of Hoffman, U.S. Patent No. 6,630,661 as applied to claim 1 above, and further in view of Glenn et al., U.S. Patent No. 6,562,655.

Applicants have canceled claim 7 and have included the limitation of claim 7 in new independent claim 27.

Applicants respectfully submit that Baba in combination with Hoffman and Glenn would not disclose, teach or suggest Applicants' new independent claim 27 or claims dependent thereupon. As was discussed herein above, Applicants respectfully submit that Hoffman would not provide any motivation, teaching or suggestion to combine with Baba since Hoffman discloses discrete structures so the combination of Baba and Hoffman would result in a plurality of discrete structures with spaces between each of the structures surrounding the semiconductor chip 2 and the chip components 7 resulting in the escape of electromagnetic waves. Applicants also note that auxiliary board 10 of Baba has a length and width which exceeds corresponding dimensions of semiconductor chip 2 so the auxiliary board 10 can not have the dimensions of a discrete chip component as taught by Hoffman. Thus, Applicants respectfully submit that Hoffman does not remedy the deficiencies in Baba since Baba requires a solid, continuous structure that exceeds the dimensions of a discrete chip component to surround the semiconductor chip 2 in order to prevent the escape of electromagnetic radiation.

Glenn discloses a plurality of springs 150 with spaces between the springs 150 (see FIG. 1 of Glenn). Applicants respectfully submit that Glenn fails to remedy the deficiencies in the combination of Baba and Hoffman. Glenn would not provide any motivation, teaching or suggestion to combine with Baba and Hoffman since Glenn discloses discrete springs 150 with

spaces between the springs so the combination of Baba, Hoffman and Glenn would result in a plurality of discrete springs with spaces between each of the springs surrounding the semiconductor chip 2 and the chip components 7 resulting in the escape of electromagnetic waves. As discussed herein above, Baba requires a solid, continuous structure that exceeds the dimensions of a discrete chip component to surround the semiconductor chip 2 in order to prevent the escape of electromagnetic radiation.

Therefore, Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a) and submit that the rejection to claim 7 has been overcome.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claim 11 under 35 U.S.C. § 103(a), as being unpatentable over Jimarez et al., U.S. Patent No. 6,407,334 in view of Hoffman, U.S. Patent No. 6,630,661 as applied to claim 1 above, and further in view of Glenn et al., U.S. Patent No. 6,562,655.

Applicants have canceled claim 11.

Therefore, Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a) and submit that the rejection to claim 11 has been overcome.

Conclusion

In light of the foregoing remarks and amendments, all of the claims now presented are believed to be in condition for allowance, and Applicants respectfully request that the outstanding rejections be withdrawn and this application be passed to issue at an early date.

The Examiner is urged to call the undersigned at the number listed below if, in the Examiner's opinion, such a phone conference would aid in furthering the prosecution of this application. No fee is due by virtue of this response. However, if the PTO determines that a fee is required, please charge Applicants' Deposit Account, 09-0456.

Respectfully submitted,

For: Michael Gaynes, et al.

By: /Anthony J. Canale/_____
Anthony J. Canale
Registration No. 51,526
Telephone No.: (802) 769-8782
Fax No.: (802) 769-8938
EMAIL: acanale@us.ibm.com

International Business Machines Corporation
Intellectual Property Law - Mail 972E
1000 River Road
Essex Junction, VT 05452